### ACEC-DOT BRIDGE SUBCOMMITTEE

Minutes of February 7, 2005 Meeting

#### **Attendees:**

Greg Perfetti, NCDOT (Co-Chair)
Allen Raynor, NCDOT
Lonnie Brooks, NCDOT
Tim Rountree, RWA
Tom Tallman, WSA
Chris Glass, McKim and Creed (Co-Chair)
Kevin Austin, BHME
David Ruggles, Stewart Engineering
Eddie Wetherill, Wetherill & Associates

### I. Effects of the Budget shortfall on PEF Work

Allen attended an internal meeting on 2/4/05 that indicated substantial cuts in the highway program. Most significant cuts would be in the R, U and I projects. Most of the B projects would proceed as scheduled.

Within the next two weeks it is expected there will be a re-assignment of project priorities. The new draft TIP will be issued around April 1<sup>st</sup> that will reflect the DOT cash position.

#### II. Future Advertisements

Allen stated that the possibility of bridge work being advertised to consultants will become clearer as the project priority re-assignments are made.

# III. Bridge Policy Changes

Chamfering Acute Corners on End Bents – Eliminates acute triangular sections at the ends of end bent caps. Policy is to be effective with the April 1, 2005 letting.

**Tooled Contraction Joints in Parapets and Sidewalks** – Adds transverse tooled contraction joints in parapets and sidewalks at a spacing of 8 to 10' to control shrinkage cracking between expansion joints.

All of these memos are available on the Structure Design Web Page at:

http://www.doh.dot.state.nc.us/preconstruct/highway/structur/polmemo/old memo.htm

#### IV. Box Beams

It was indicated that standard concrete strengths for pre-stressed concrete should range between 5,000 PSI and 10,000 PSI. If strengths over 10,000 PSI are needed, they should be discussed with the department on an individual basis. Structure Design is working on a policy to revise concrete strengths.

NCDOT interpretation of Section 8.9 of the PCI Bridge Design Manual:

Use 8.9.3 to determine required P/T force based on bridge width. Use Table 8.9.2.1-1 to set P/T spacing.

Preferred Tie Rod Sizes:

#### 1 1/4"Ø rods or 0.6"Ø strands in pairs (based on 8.9.3)

Box beam standards are in process. And will be available for download from the Structures web site when standards are completed.

### V. LRFD Update/ Training

The Department is doing two demonstration projects, one steel and one concrete. Neither is completed through design at this time.

It was noted the FHWA is doing a touring show. Their visit to North Carolina has not been scheduled at this time. It was discussed that this could be a training opportunity through the joint training committee.

# VI. Timing of Design Manual Revision to reflect Policy Changes

Anticipated date is September 2007 to incorporate LRFD requirements.

A committee is now being formed to revise the Standard Spec book.

# VII. Microstation V8 Implementation

The DOT is now substantially converted to V8 for new projects. Structure design will wait until the rest of the DOT has completed training and standard revisions to start requiring files to be submitted in V8.

# VIII. Next Meeting

The next bridge subcommittee meeting will be on **Monday May 2, 2005** at 9:00 a.m. in Structure Design Conference Room B

Following meetings for the year will be Monday August 1, 2005

Monday November 7, 2005